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“IT is not calling a thing by a name that makes it a system, and that is the point I wish to urge in regard to the so-called American system. There is none. There are various attempts to systematize gymnastics in various parts of the country, under different people, with different and limited experiences. They join various exercises together, and tag them a, b, c, — x, y, z, and claim that the result is a system.”

These were Dr. E. M. Hartwell's words at the Physical Training Conference held in Boston, in November, 1889. With Dr. Hartwell's opinion I fully agree. A system of gymnastics, to be worthy of the name, must be based on the ascertained laws of physiology; it must aim at the attainment of a definite purpose through steadily and constantly progressive exercises; and this purpose must be nothing less than the establishment of a due equilibrium between the powers physical and the powers intellectual. Of systems that possess all of these marks there are but two — the German and the Swedish. All other so-called systems are but parts of systems; they are partial in their foundation, in their purpose, or in their exercises.

Take, for instance, Dr. Sargent's system of pulley-weights. As far as it goes, it is good. Based on sound physiological principles, it is intelligently conceived and skillfully worked out; but it is not a complete system of gymnastics. Dr. Sargent himself would hardly make such a claim. Its exercises are especially adapted to remedy lack of development in particular parts or to strengthen special muscles, and belong rather to medical, than to educational gymnastics. Moreover, they do not tend, or tend in only a very slight degree, to invigorate the nervous system; and hence, muscles developed by their means are usually dull and heavy, without elasticity or quickness.

Then there is the “Delsarte system”! If Francois Delsarte could see what his admirers call Delsarte gymnastics, he would turn in his grave. He never thought of giving the world a system of gymnastics. An actor and singer by profession, the fail-

ure of his voice compelled him to retire from the stage in 1834. Devotion to his art and to the members of his craft, however, led him to develop a system designed to give "a solid foundation to the art of expression." His exercises consist of a series of postures and relaxing movements intended to impart the power of giving graceful and distinct expression to every species of thought and every phase of emotion. They are not designed for strengthening the muscles or maintaining the health. In obedience to a popular craze for Delsarte exercises, teachers of this system, without any regard to physiological laws or the purposes in view, have loaded it down with exercises that are Delsartean only in name. I know of some instances in which this was admittedly done, because "it paid."

The "Dio Lewis system" probably comes nearer to being a genuine gymnastic system than any other so-called American system. Although most of his exercises were German in origin, still, Dio Lewis had some new ideas. To him is due the credit of introducing wooden dumb-bells, and of being the first in this country to abolish dangerously heavy exercises; while he awakened much interest in gymnastics for girls.

There is also a host of dumb-bell, wand and Indian club exercises, for all of which the name of "system" is claimed. Some of them are good as beginnings, or as parts of systems; others are unworthy of any consideration whatever. If observation and study have proved anything with regard to gymnastics, it is that any system or any form of exercise that develops some part or parts of the body at the expense of others, is fundamentally faulty. A partial system is to be saved from utter condemnation only by proof that, on the whole, it does more good than harm.

The German system is older than the Swedish.

The first *Turnlehrer* — gymnastic teacher — was Johan Friedrich Simon at Basedow's school in Dessau, in 1776. The second was Johan Jacob Du-Toit, a Swiss, also a teacher at Basedow's school, in 1778. Salzmann at Schnepfenthal, in 1784, was the third; and then came *Friedrich Guts Muths* at the same place, 1786. He was born in 1759 and died in 1839. Guts Muths published his first book, "Gymnastics for Youth," in 1793. It aroused lively interest; but he only aimed at creating military-school gymnastics.

Pestalozzi, in an article on bodily exercise in "Wochenschrift

für Menschenbildung," 1807, also awakened the minds of educators on the subject. All helped to pave the way for *Friedrich Ludwig Jahn*, who is called the father of the German *Turnkunst* — or gymnastics. Jahn was born Aug. 11, 1778, and died Oct. 15, 1852. He opened his first public Turnplace in the Hasenheide, near Berlin, Aug. 10, 1811. Jahn's was a popular, all-sided gymnastics, very different from Guts Muth's, with its semi-military ideals. It aroused a great deal of antagonism, as being rough and dangerous. Thenceforward books on gymnastics, both for military and popular purposes, multiplied.

Adolph Spiess, born Feb. 3, 1810, died May 9, 1858, worked hard and successfully to introduce a more educational school gymnastics. He agreed with some of Guts Muth's ideas, and made use of them.

Eulenberg, Neumann, and Rothstein, who had been in Stockholm, wrote in favor of introducing the Swedish gymnastics into Germany, between 1842-1860. They gained some following for the Swedish gymnastics, and some portions of the educational and military Swedish gymnastics were adopted. Some pieces of Swedish apparatus are still in use in the German army.

The contest in Germany between the two systems of gymnastics is hardly at an end yet, but the German *Turnkunst* will always hold its own; it is steadily gaining ground everywhere as a *popular* gymnastic.

About the same time that Jahn began his crusade in Germany, Ling began his efforts in Sweden.

Pehr Henrik Ling was born in Småland, Nov. 15, 1776, and died in Stockholm, May 3, 1839. He was dismissed from the Wexiö Latin school, because he would not "tell on" some of his school-fellows; then he commenced travelling on foot through Sweden, Denmark, Germany, France and England, and made his living as a waiter, or as an interpreter, or by giving lessons in languages.

In 1793, Ling commenced study at Upsala University, Sweden, where he was graduated in Theology in 1797. He was then some years in Copenhagen, where he took a lively part in the gymnastic and fencing lessons by Captain Nachtigall, who was one of Guts Muth's followers.

From the autumn of 1804, Ling was fencing-master in the University of Lund, in Sweden, till 1812, when he was appointed

gymnastic instructor at the military school near Stockholm. It is interesting to know, that when Ling first advanced his ideas of a normal school of gymnastics he was met with opposition and rebuff. "We have jugglers and rope-dancers enough," the minister of the king said, "without burdening the state treasury on that account." Nevertheless, the Royal Gymnastic Central Institute was organized in Stockholm in 1813 by the government, and Ling was its director till he died. Here he showed his great organizing skill and untiring energy. Ling did not devote much time to writing on gymnastics, and what is known of his ideas has been given to the world by his pupils, Branting, Georgii, and his son Hjalmar Ling. They, as well as Hartelius, Nyblæus, Törngren, Liedbeck, Balck, and others, have made many improvements and devised new exercises, but they have done so in accordance with the principles laid down by Ling.

The introduction of the Swedish gymnastic system into foreign countries has been slow — a fact that may perhaps be accounted for by the lack of energy in the Swedes as a people. Even in Sweden, Ling's system was not established without a struggle. But during the last thirty years the "Ling system" has been followed in accordance with the ideas of its founder, and has been made obligatory in all schools and in the army.

Since 1882, however, when there was a Scandinavian gymnastic tournament in Stockholm, at which the Finlanders and Norwegians captured all hearts by a combination of Swedish and German gymnastics, some of the Swedish gymnastic clubs have introduced the use of German gymnastic apparatus. Captain Balck, who is probably the best gymnastic teacher in Sweden, saw that the horizontal and parallel bars, Indian clubs, dumbbells and wands would give more popularity to gymnastics, and so he brought them into use. This innovation has led to a very spirited rivalry between Balck's party and the pure Ling party, represented by Professor Törngren, the director of the Central Institute. Balck desired to have an international gymnastic festival held in Stockholm. Törngren, afraid, it is alleged, of the popularity of the German devices introduced by his rival, opposed the idea. Nevertheless, the tournament was held in May, 1890, and was opened by the Crown Prince of Sweden and Norway. Representatives were present from Germany, Austria, France, England, Russia, Denmark, Finland and Norway; and it is highly

significant that the French government honored Captain Balck with the "Cross of the Legion of Honor."

Let us now consider the main characteristics of each of these rival systems of gymnastics and endeavor to ascertain the reason for the rivalry that has existed and still exists between them.

Father Jahn's system provides gymnasiums in which a variety of apparatus is employed, the principal pieces being the horizontal bars, the parallel bars, flying rings, trapeze, ladders, horse, buck, dumb-bells, wands, etc. With each of these pieces, many movements, carefully graded from the easiest and simplest exercises to the heaviest and most difficult acrobatic feats, may be performed. By the systematic use of these exercises, a great development of muscle and proportionate strength, as well as great skill and daring may be attained.

An hour in German gymnastics is generally begun with a short exercise in calisthenics, running and fancy steps, with or without dumb-bells. But these exercises are used only as a means of limbering the joints in preparation for the heavier apparatus exercises. They are not arranged after any physiological rule, and often, very little thought is given to the form in which they are executed. After the preliminary exercises, the hour is divided into two parts — one for exercise on arm apparatus and one for exercise on leg, or jumping, apparatus.

The charge is frequently made that the German Turners have bad figures, especially that they stoop. I regret to have to admit the truth of the statement. It would be unfair, however, to lay this fault at the door of the German system as a system. It results from carelessness in teachers and their assistants, the "Foreturners." Can anyone believe that it is possible for a man in five or six months — the time required for a normal course at the Royal Central Turnanstalt, in Berlin — to acquire the necessary knowledge of anatomy and physiology, and to obtain a mastery, in both theory and practice, of the thousands of movements within the German system? The graduate of this school will frequently be found to have a special liking for some particular piece of apparatus or some particular exercise, which he will use to the neglect of other apparatus and other exercises equally valuable. Or he will give all his attention to the mere doing of the exercise without correcting the faulty manner in which it is performed, or attending to the style of the gymnast in "starting"

or "dropping" from the apparatus. These faults in the teacher are the inevitable consequence of inadequate professional training.

German gymnasiums are generally well attended; and, when the class is large, as it usually is, it is divided into squads of ten or fifteen, each squad being under the direction of a leader, or "Foreturner," as he is called, and a second leader. These leaders are for the most part young men without normal training, who, because they show more skill than their companions, are selected to serve as officers within the club. In some clubs special lessons are given to the "Foreturners," but this rule is by no means universal. Is it not reasonable to suppose that these young men who attend the gymnasium only for their own health and amusement, and not for purposes of study, are, as a general thing, unfitted to teach others? They may become, and often are, most expert in practical work; but, knowing nothing of the theory, of the reasons and the purposes of the various exercises, they are not the proper persons to direct others.

Then again, the young gymnast, imitating what he has seen others do, is often permitted, unaided and uninstructed, to rush into all kinds of exercises without reference to their order or suitability. In this way, he is almost sure to acquire bad habits and incorrect positions.

These faults—the lack of sufficient normal training in the leading teachers, the inexperience and ignorance of the assistants, and the license granted to students,—are surely sufficient to account for the stooping figure and faulty carriage that are only too common in German gymnasiums. When, on the other hand, the leading teacher knows his business and properly trains his assistants, the results, I am sure, will not be bad.

Gymnastics, according to the Ling system, may be performed either with or without apparatus. The exercises invariably proceed in the following order: (1) Order-movements, (2) leg-movements, (3) arch-movements, (4) arm-movements, (5) balance-movements, (6) movements for the back, (7) movements for the front trunk, (8) movements for the sides, (9) jumping, (10) slow-leg movements, and (11) respiratory movements. A slow progression from day to day is followed in these exercises. The first day they are very easy, the next they are made a little harder, and so on.

Here at once is found the capital difference between Ling and

Jahn, both in the manner of "laying out" a "day's order," or an hour's lesson, and in the progression involved in the exercises of successive days. Ling's exercises are progressive from day to day, but one or two exercises in each group of movements being performed in any one day. Jahn's exercises, on the other hand, are progressive only within one day and with the same piece of apparatus. A piece of apparatus or an exercise that has been used to-day, may not be tried again for several days, and, when it is resumed, the work is likely to be a mere repetition of the former movement.

When the Swedes use apparatus, they generally use five or six different kinds in an hour, as, for instance, rib-wall, boom, climbing ropes, serpent-ladder, horse, and jumping-rope. The same apparatus, moreover, alternated with free movements, is used nearly every day. The apparatus remains, for the most part, the same; while the exercises gradually increase in difficulty and complexity. Every day all the parts of the body are equally exercised, and a harmonious development is the result.

The following points of superiority in the Swedish system are also worthy of note: First, a teacher of Swedish gymnastics must go through a two years' course of training before he receives his certificate, and hence, he ought to be more competent than his German brother whose course is only six months; second, as the Swedish apparatus is so constructed that a number of persons can exercise on the same machine at the same time, it is not necessary to divide the class into squads, and hence, all are under the immediate direction of the teacher who is not forced to depend on inexperienced assistants; third, more attention is paid in the Swedish system to the manner in which an exercise is performed — especially as to how it is started and ended — than to the difficulty of the exercise or the ability of the performer, and the result is a better figure and a more correct carriage; and, fourth, the Swedish system has an immense advantage in affording most effectual exercise without the use of any apparatus whatever. This last quality — the production of results without apparatus — renders the Swedish system by far the best school gymnastic for children and for adults where no apparatus can be obtained.

To sum up the respective advantages of the two systems, I would say that the Swedish system provides a more harmonious development of all parts of the body, secures a more erect car-

riage, imparts a readier command of all the muscles, and results, as a general rule, in a healthier physique; while the German system tends more to the development of special muscles, of strength, of skill, and of courage.

The greatest objection to the Swedish system is, that in the course of time it often becomes monotonous, whereas the German system constantly grows in interest. For this reason, independent clubs or classes, when gymnastics are not obligatory, cannot depend on the Swedish system alone. It was not until about seventeen years ago — long after all other countries were full of them — that the first voluntary gymnastic club was established in Sweden. And the Swedish clubs have never been able to create a great interest or secure a large attendance except where they have introduced some of the German apparatus.

In the great gymnastic tournament held in Havre, France, in August, 1881, where there were present some 5,000 gymnasts from all parts of the globe, those from Christiania, Norway, were awarded the only gold medal. There can be no doubt that the skillful combination of the Swedish and German systems introduced into Norway by Mr. Peter Clausen in 1870, was the cause of this success. "The Swedish system is the foundation on which we shall build," says the official report of the French jury appointed to decide on the merits of the various systems. That as a whole it would suit the lively French people, however, they did not believe. They considered it too serious and too limited, and were afraid of the "pedantic science that would drive amusements away from gymnastic exercises."

Independent and liberal-minded Americans will, on the whole, agree with the French jury.

Although I have expressed the opinion that the Swedish system is the most suitable for use in schools and other places where apparatus cannot be provided, and although I regard the German and Swedish gymnastics as the only two that deserve the name of "system," still I do not think that every invention in gymnastics outside these two systems ought to be discarded. As our nation is composed of many various elements, and many varied types, so should be the American gymnastic system when it is finally evolved. Such a system will include exercises to secure discipline and to establish a due equilibrium between the powers of the mind and the powers of the body; exercises to develop par-

ticular muscles or particular parts of the body; exercises to develop skill, courage, elasticity and precision; and it will exclude neither popular outdoor sports nor movements to secure physical grace and the appropriate expression of thought and emotion. All exercises, however, must be founded on strictly physiological laws and should have for their chief object the promotion of the general health.

In every elementary school, there should be a thorough course of physical culture founded on the "free movements" of the Swedish system. For gymnastics in colleges, universities, clubs and associations, my plan for an hour's lesson would be as follows:

1. Ten to fifteen minutes of Swedish "free movements"; for ladies, some "fancy steps" might be added.
2. Ten to fifteen minutes of exercise with "arm-apparatus," either German or Swedish, or with an American pulley-weight machine. For this purpose the class might be divided into squads, and care should be taken to change the apparatus every day.
3. Fifteen minutes devoted to jumping or vaulting.
4. Ten minutes of dumb-bell, club, or wand work.
5. Ten minutes devoted to calisthenics or "relaxing movements," which might be performed to the accompaniment of music.

Out-door sports should be practised independently of, though they should always be accompanied by, gymnastic lessons. Unless so accompanied, games are apt to have a very one-sided effect; while those who pursue a thorough course of gymnastic training will as a general rule excel in athletic sports.

Measurements and special work required by individuals should also be outside the regular lessons.

In 1890 the Swedish system of educational gymnastics was introduced into Boston public schools. Dr. Edw. M. Hartwell, probably the best authority on Physical Training in this country, was appointed in 1891, "Director of Physical Training," and the writer of this was appointed as his assistant, and as such, has taken charge of the instruction of the Swedish gymnastics to the teachers and through them to the children.

It is fair to say, that the system has rapidly gained ground and has been taken hold of by all the teachers with great enthusiasm and energy. In every class-room throughout the city fifteen to twenty minutes are daily devoted to the gymnastic lessons, and

the improvement of the children in discipline, precision, quickness and carriage has been remarkable. But it must be said, that without the good-will and excellent work of the school teachers, it would have been impossible to gain this result in such a short time. On the other hand, it is interesting to notice that the longer this system has been in use in the schools, the better it is liked, both by the teachers and the children.

